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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/067,294	02/07/2002	Akihiro Hashiguchi	Q68446	7908

7590 07/25/2003

SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC
2100 Pennsylvania Avenue, N.W.
Washington, DC 20037

EXAMINER

KIM, PETER B

ART UNIT	PAPER NUMBER
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2851

DATE MAILED: 07/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/067,294	HASHIGUCHI, AKIHIRO	
	Examiner	Art Unit	
	Peter B. Kim	2851	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 February 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 82002, 220026
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

The drawings are objected to because reference 1 is not indicated in the drawings. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The disclosure is objected to because of the following informalities: on page 6, line 29 instead of “2,” “two” seems to be more appropriate. On page 14, line 26, instead of “4,” “four” seems to be more appropriate. On page 11, line 24, “through1d” seem to be a typo. The following areas have information which is not represented very clearly:

On page 3, lines 2-10, it is not clear how the wrinkle can be suppressed and “[a]ccording to this,” the processing quality is deteriorated. On page 11, line 26 – page 12, line 5, it is not clear what the temperature difference level is. On page 15, line 24 – page 16, line 2, it is not clear what is “characteristic.” On page 18, lines 10-14, it is not clear what is meant by “a few different.”

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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Claims 2-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding Claim 2, the structural relationship between the “rotating body” and “one rotating body constituting the rotating body pairs” is not clear.

The remaining claims, not specifically mentioned, are rejected for incorporating the defects from the base claim by dependency.

The following art rejection is made based on the examiner’s best understanding of the claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakabashi (JP 2000-330252) in view of Ogawa et al. (Ogawa) (6,320,642).

Nakabashi discloses a heat developing apparatus with a preliminary heating means (II) that has plurality of rotating body pairs (2A, 2B) for nipping the heat developing sheet and for heat-conveying it to the developing temperature and after the heat developing sheet is brought into contact with the rotating body from the tangential line direction of a point on an outer periphery of one rotating body constituting the rotating body pairs, the heat developing sheet is nipped. Nakabashi also discloses at least one roller in the rotating body pairs that is a heating

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roller (2A) and comprising thick-wall metallic pipe (para 0015). However, Nakabashi does not disclose changing direction of the heat developing sheet by the pair of rotating body pairs.

Ogawa discloses in Fig. 19, the heat development apparatus with the rotating elements used to change direction of the heat developing sheet. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to provide the change of the direction as taught by Ogawa to the invention of Nakabashi in order to obtain wrinkle and crease free paper as taught by Ogawa in col. 13, lines 9-15.

Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakabashi in view of Allen (5,893,003).

Nakabashi discloses a heat developing apparatus with a preliminary heating means (II) that has plurality of rotating body pairs (2A, 2B) for nipping the heat developing sheet and for heat-conveying it to the developing temperature and after the heat developing sheet is brought into contact with the rotating body from the tangential line direction of a point on an outer periphery of one rotating body constituting the rotating body pairs, the heat developing sheet is nipped. Nakabashi also discloses at least one roller in the rotating body pairs that is a heating roller (2A) and comprising thick-wall metallic pipe (para 0015). However, Nakabashi does not disclose changing direction of the heat developing sheet by the pair of rotating body pairs. Allen discloses in Fig. 1, the heat development apparatus (14) with the rotating elements (16) used to change direction of the heat developing sheet. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to provide the change of the direction as taught by Allen to the invention of Nakabashi in order to maintain correct optical density as taught by Allen in col. 5, lines 1-19.

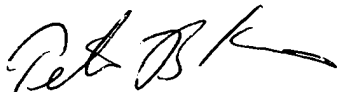
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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Kim whose telephone number is (703) 305-0105. The examiner can normally be reached on Monday-Thursday from 8:30 AM to 6:00 PM. The examiner can also be reached on alternate Fridays during the same hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Russ Adams can be reached on 703 308 2847. The fax phone numbers for the organization where this application or proceeding is assigned are 703 872 9318 for regular communications and 703 872 9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 306 3431.

A handwritten signature in black ink, appearing to read 'Pet B Kim', with a stylized flourish at the end.

Peter B. Kim
Patent Examiner
July 24, 2003